

National Energy Technology Laboratory



Energy Efficiency

Project Management Center

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National Energy Technology Laboratory



National Energy Technology Laboratory

Chief Counsel

Director

Public Affairs
Coordination

Strategic Center for Natural Gas & Oil

Systems,
Analysis & Planning

Natural Gas

Gas Technology
Management

Petroleum

Petroleum
Business

Petroleum
Technology
Management

Strategic Center for Coal

Systems,
Analysis &
Planning

Coal & Power R&D

Environmental
Projects

Gasification &
Combustion
Projects

Power Systems
Projects

Major Demon- stration Projects

Advanced Energy
Systems

Environmental &
Industrial

Advanced Initiatives

EE Power & Vehicles
(EERE)

EE Buildings &
Government
(Analysis & Planning)

Energy &
Infrastructure

Science, Technology & Analysis

Separations &
Fuels Processing

Energy System
Dynamics

Engineering
Research

Environmental
Science

Geosciences

Chemistry &
Surface Science

Simulation,
Analysis &
Comp. Science

Technology Impacts & International Coordination

Institutional & Business Operations

Acquisition &
Assistance

Information
Technology

Financial
Management

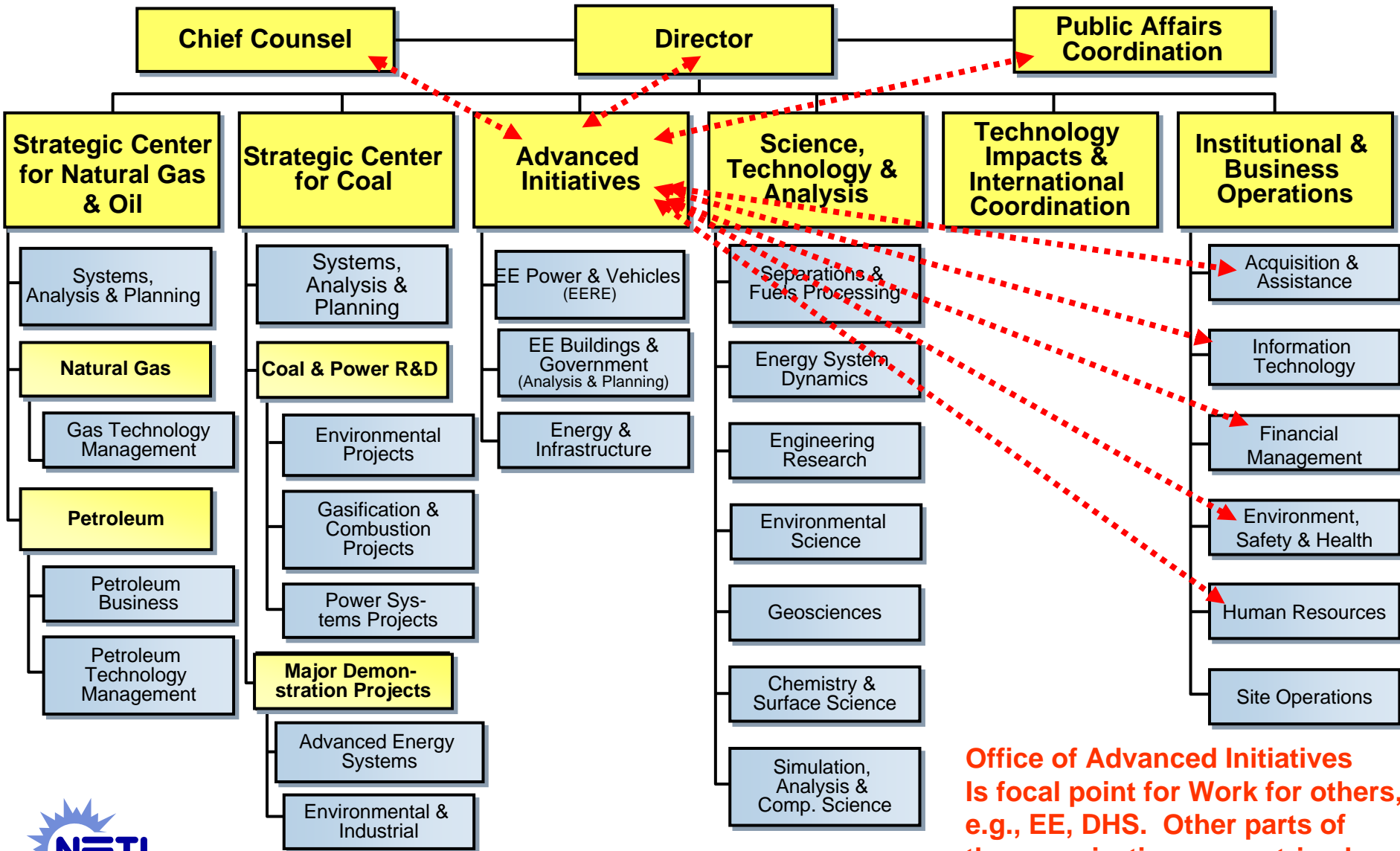
Environment,
Safety & Health

Human Resources

Site Operations



National Energy Technology Laboratory

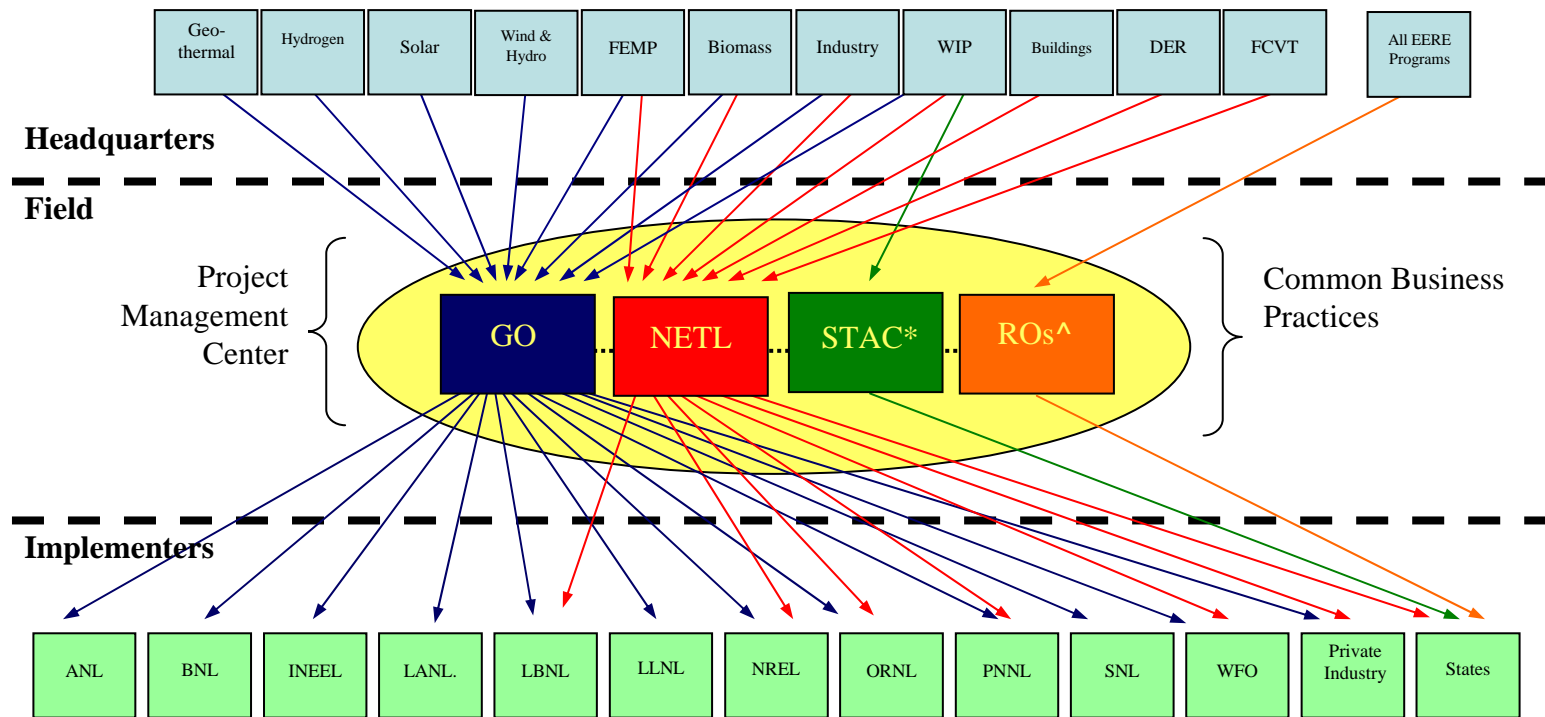


Office of Advanced Initiatives
Is focal point for Work for others,
e.g., EE, DHS. Other parts of
the organization are matrixed
in as needed.



Implementing the EERE Activities

Streamlined Implementation

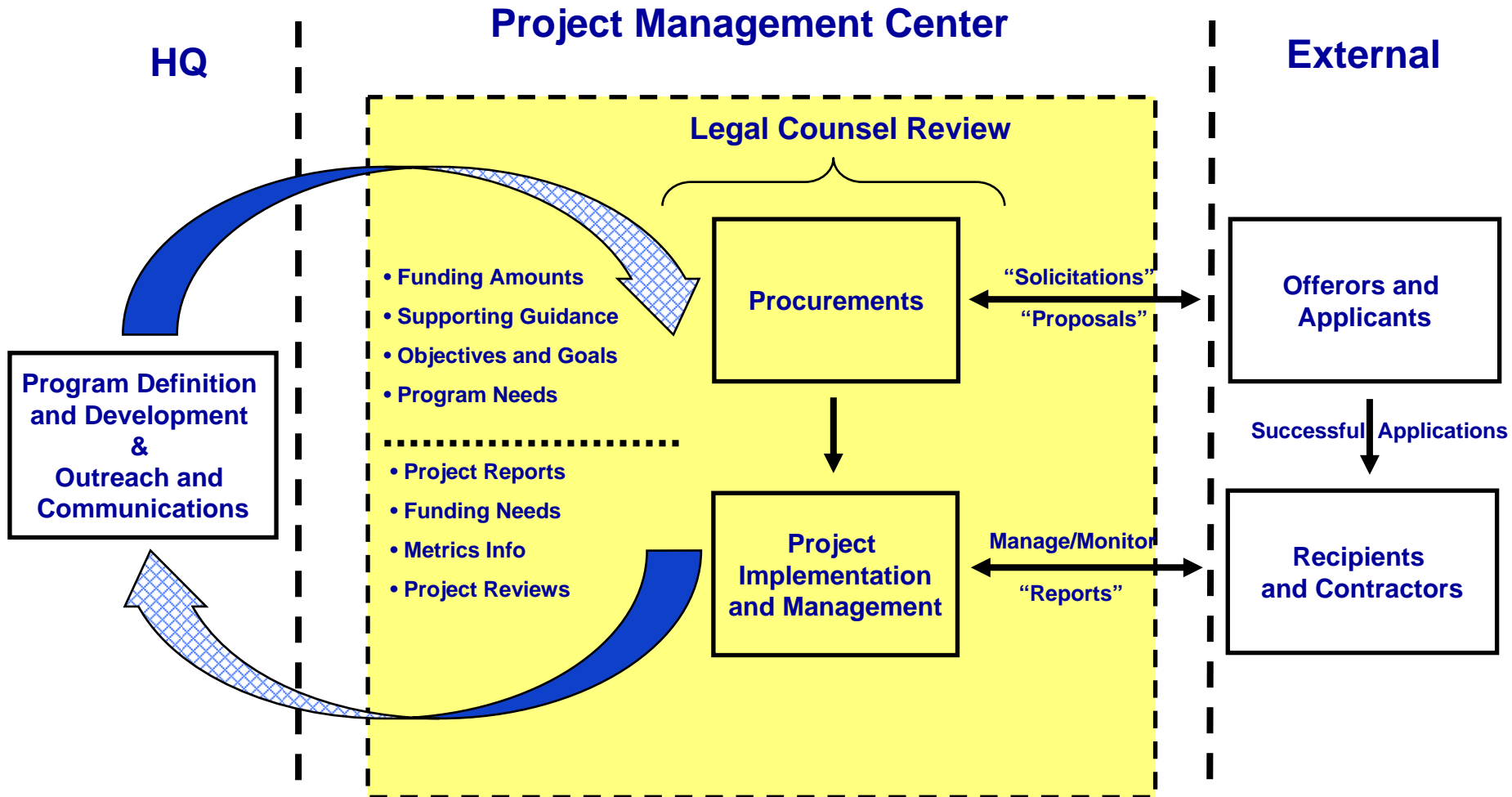


*All state-based R&D would also flow through STAC

^All EERE 11 Programs work with the ROs on deployment activities



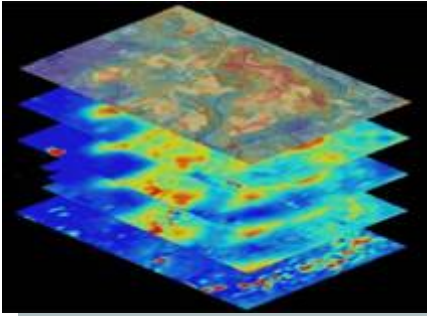
General Business Model



Initiating → Planning → Executing → Controlling → Closing



OAI: Activities other than DOE Fossil Energy



Energy-Related Water

Growing issue in siting energy infrastructure

Homeland Security

Systems analysis and projects for infrastructure protection



Energy Efficiency & Renewable Energy

Project Management Center
FreedomCAR
Distributed Energy
Building Technologies
Weatherization & Intergovernmental Program







Electric Delivery & Energy Assurance



Building Technologies: R&D, Codes/Standards

“making buildings more energy efficient, productive, & affordable”



Building Technologies Program

Multi-Year Research, Development and Demonstration Plan

Planned program activities for 2004-2010

FINAL DRAFT January 9, 2004

- Residential Buildings
- Commercial Buildings
- Emerging Technologies
 - Lighting
 - Conditioning & Refrigeration
 - Appliances
 - Building Envelope
 - Analysis Tools
 - Design Strategies
- Equipment Standards and Analysis
- Oil Heat R&D Residential Buildings



Technologies for High Efficiency Clean Vehicles

Vehicle Systems

- Aerodynamics
- Rolling Resistance
- Accessory Loads
- Systems Analysis and Modeling



Combustion and Emissions Control

- Combustion R&D
- Emissions Controls
- Clean Combustion

Fuels

- Advanced Petroleum Based Fuels
- Non-petroleum Fuels – Synthetic & Renewable
- Fischer-Tropsch Fuels & Blendstocks
- Advanced Lubricants

Hybrid Propulsion

- Hybrid Electric Vehicles
- Electric Vehicles
- Power Electronics
- Batteries (NiMH & Lithium)
- Inverters/Controllers
- Motors
- Ultracapacitors

Deployment

- EPACT Fleets
- Test & Evaluation

Innovative Concepts

- GATE

Materials Technology

- Metals
- Composites
- Ceramics
- Propulsion Systems
- High Strength Weight Reduction

FY05: PMC-NETL Competitives

Buildings

- Solid State Lighting (42118): **5 Awards Complete**
- Building Codes & Standards (42256): 1 July Award

Freedom Car

- Clean Combustion Technologies (42099): Jun/Jul Awards
- Program Wide Solicitation: Various Topics (42296): Jun/Jul Awards
- University Research: Various Topics: Aug/Sep Awards
- Analysis Market Approaches: July Award

Industrial

- Grand Challenge: Mining Technologies (42064): **5 Awards Complete**

Office Weatherization & Intergovernmental Programs

- State Energy Program Projects: Aug/Sep Awards
- Million Solar Roof Installations: Jul/Aug Awards



FY06: Potential Solicitations

Buildings

- National Lab Call for Solid State Lighting: 2nd/3rd Qtr FY05 issuance
- Solid State Lighting Core Technologies: Summer FY05 issuance
- Solid State Lighting Industry Technologies: Summer/Fall issuance

Freedom Car

- Possibly extend Program Wide Solicitation, Various Tech: Fall issuance

Distributed Energy

- Thermal Energy: Summer/Fall issuance

Industrial

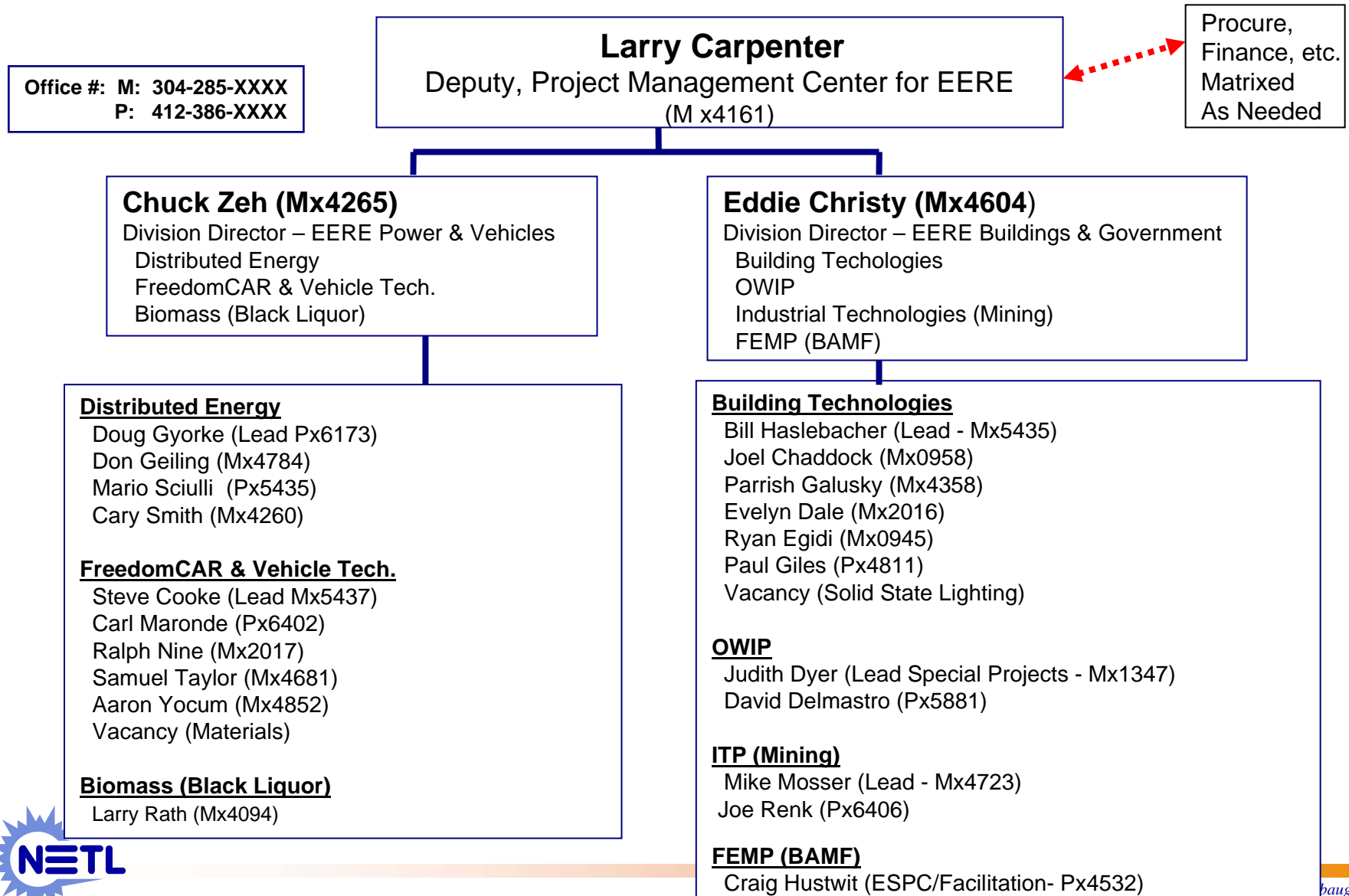
- Grand Challenge, Mining (42064): Plans to enter another round on hold

Office Weatherization & Intergovernmental Programs

- Million Solar Roof Installations: Fall 06 solicitation
- State Energy Projects: Fall 06 solicitation



EERE Project Management





**Technology is one of
the Government's
tools to ensure a
sustainable, secure,
and affordable energy
future**